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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,599	09/22/2005	Juergen Breitenbacher	10191/3583	6564

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EXAMINER	
NGUYEN, XUAN LAN T	
ART UNIT	**PAPER NUMBER**
3683	
MAIL DATE	**DELIVERY MODE**
04/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,599	BREITENBACHER ET AL.	
	Examiner	Art Unit	
	Lan Nguyen	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14 and 16-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14 and 16-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 May 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/19/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 14 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al. (USP 5388896) in view of Schubert (USP 6030055).

Re: claim 14, Hartmann shows a method for braking two wheels of a vehicle, as in the present invention, comprising: linking a first value of a first brake pressure in a first wheel-brake cylinder allocated to a first wheel 50 of the two wheels with a second value of a second brake pressure in a second wheel-brake cylinder allocated to a

second wheel 50 of the two wheels, wherein the linking is given on the basis of hydraulic pressures at respective intake valves including a first intake valve 5a and a second intake valve 5b, as stated in the Abstract wherein the pressures of the two valves are employed in the controlling method. Hartmann lacks the concept of employing a differential pressure in the first intake valve and in the second intake valve in the controlling method. Schubert teaches the concept of employing a differential pressure in an intake valve in a control method instead of using pressure values in order to increase accuracy in a pressure controlling method in column 1, lines 47-end. Schubert further shows the characteristics curves in figures 6a and 6b, for differential pressure in relationship with current in order to determine the current from the differential pressure and vice versa. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hartmann's method to employ the differential pressure of an intake valve in a controlling method as taught by Schubert instead of using pressure values in order to increase accuracy in a pressure controlling method. As modified, Hartmann's method would be employing characteristic curves as taught by Schubert for the first and the second intake valves in order to increase accuracy in the controlling method in the same manner for both valves. As such, the current of each valve can be determined from the characteristics curves as shown by Schubert.

Re: claims 16-19, Schubert further teaches the concept of using characteristic curves of differential pressure versus current in controlling the intake valve in figures 6a and 6b. As modified by Schubert, Hartmann's method would be employing

characteristic curves as taught by Schubert for the first and the second intake valves in order to increase accuracy in the controlling method.

Re: claim 20, Hartmann further teaches the concept of setting a limit in the difference between the pressures of the intake valves 5a, 5b in the Abstract, lines 4-7.

Re: claim 21, Hartmann teaches the step of the linking indicates a difference between the first pressure and the second pressure. As modified by Schubert, Hartmann's method would comprise the step of indicating a difference between the first pressure differential and the second pressure differential.

Re: claims 22 and 23, Hartmann further teaches the concept of taking into consideration the vehicle speed and transverse acceleration in the controlling scheme in controlling the two wheels 5a and 5b which belong to the same axle as stated in the Abstract.

Re: claim 24, Hartman shows a device for braking two wheels of a vehicle, as in the present invention, comprising: a first wheel brake cylinder allocated to a first wheel 50 of the two wheels; a second wheel brake cylinder allocated to a second wheel 50 of the two wheels; a first intake valve 5a allocated to the first wheel brake cylinder; a second intake valve 5b allocated to the second wheel brake cylinder; and a logic arrangement 1 for linking a first hydraulic pressure at the first intake valve and a second hydraulic pressure at the second intake valve, as stated in the Abstract wherein the pressures are employed for controlling the brakes. Hartmann lacks the concept of employing a differential pressure in the first intake valve and in the second intake valve in the device. Schubert teaches the concept of employing a differential pressure in an

intake valve in a control device instead of using pressure values in order to increase accuracy in a pressure controlling device in column 1, lines 47-end. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hartmann's device to employ the differential pressure of an intake valve in a controlling device as taught by Schubert instead of using pressure values in order to increase accuracy in a pressure controlling device.

Re: claims 25 and 26, Schubert further shows that the intake valve is a differential-pressure regulating valve and that the valve is control by a characteristic curve of differential pressure versus current. As modified by Schubert, Hartmann's device would comprise first and second the intake valves to be differential-pressure regulating valves and that the valves would be controlled by a characteristic curves of differential pressure versus current as taught by Schubert in figures 6a and 6b in order to improve accuracy.

Response to Arguments

4. Applicant's arguments filed 3/19/08 have been fully considered but they are not persuasive.

- Applicant is arguing the references separately and not as a combination. Hartmann is relied upon for the teaching of controlling two valves in a brake system. It is true that Hartmann does not employ pressure differentials at each valve. Schubert teaches the use of pressure differential in controlling a valve for better accuracy and responsive result. As combined, the controlling method of

Hartmann would have employed the differential pressure of each valve in the controlling method. It would make no sense if only one valve in Hartmann's method is controlled with a differential pressure and not the other as combined with Schubert. Why would one in the art want to take advantage of improving the control of one valve by the teaching of Schubert and not doing the same for the other valve? As such, the two valves have to be controlled in the same way, by using differential pressures in the same manner as Applicant. Schubert further teaches the characteristics curves in order to define the relationship between differential pressures and currents. By having the curves, when the pressures are known, the currents would also be known and vice versa.

- For these reasons, the rejection is still deemed proper and is repeated above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/ 4-24-08
Primary Examiner
Art Unit 3683